

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-271323

(43)Date of publication of application : 20.10.1995

(51)Int.Cl.

G09G 3/18

G02F 1/133

G02F 1/133

G02F 1/133

H04N 5/66

(21)Application number : 06-085854

(71)Applicant : **HITACHI LTD**
HITACHI DEVICE ENG CO LTD

(22)Date of filing : 31.03.1994

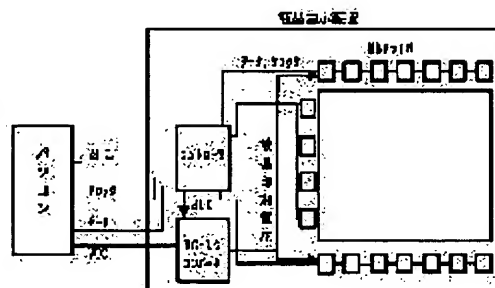
(72)Inventor : **OWAKI YOSHIO**
OWAKU YOSHIHARU
SATO YUKIHIRO

(54) LIQUID CRYSTAL DISPLAY DEVICE

(57)Abstract:

PURPOSE: To reduce the power consumption and improve the operability by stopping a display operation and also controlling a driving circuit or a driving voltage generating circuit so that a substantial DC. component is not impressed on liquid crystal.

CONSTITUTION: A sleep mode input is provided in the input interface part of a liquid crystal display device. When a host (a personal computer) side enters into a sleep mode, a sleep mode signal is supplied to a display controller and then the display operation is stopped. Simultaneously, a signal SL0 is supplied to a DC-DC converter forming a liquid crystal driving voltage and then, for example, the driving voltage to be supplied to liquid crystal drivers is set to the same potential as that of a counter electrode (a common electrode) so that the DC. voltage is not applied on both electrodes of liquid crystal. Further, a power source part for turning on a fluorescent lamp being used for a back- lighting is included in the DC-DC converter and when the converter is made to be in the sleep mode, the fluorescent lamp is turned off.



LEGAL STATUS

[Date of request for examination] 23.01.2001

[Date of sending the examiner's decision of rejection] 11.03.2003

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office